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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,304	02/26/2004	Jun-Hyung Park	IK-0077	3453
34610	7590	02/10/2006		
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			EXAMINER WILLIAMS, MARK A	
			ART UNIT	PAPER NUMBER
			3676	

DATE MAILED: 02/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/786,304	<b>Applicant(s)</b> PARK, JUN-HYUNG	
	<b>Examiner</b> Mark A. Williams	<b>Art Unit</b> 3676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 16-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-12 and 15 is/are rejected.
- 7) ☒ Claim(s) 2,4,13 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Claims 16-31 to groups II and III are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to nonelected inventions, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 12/15/05.

The restriction is considered proper. The inventions are distinct, each from the other because of the following reasons:

Inventions III and I are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination of a portable computer of group III does not require the particular hinge design of group I. The subcombination has separate utility such as being used to hinge a variety of different type of devices, not just a portable computer.

Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the dual display control method (or process) of group II can be practice with any of many different type of hinge designs.

2. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Groups II and III, restriction for examination purposes as indicated is proper.

### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the adjacent edge of the top surface with reduced width of claim 10; and “the hinge mechanism

extends though corresponding removed portions of facing adjacent sides of the units” of claim 9 must each be shown or the feature(s) canceled from the claim(s).

No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 3, 9-11, and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 10, it is unclear in the context of the invention what exactly constitutes an “adjacent edge of the top surface” and “a reduced width relative to distal edge and side edges...” as claimed.

In claim 11, it is unclear in the context of the invention exactly what is meant by “rear ends of equal sides...” as claimed.

In claims 3 and 15, it is unclear in the context of the invention what is exactly meant by “are disposed out of sides of...” as claimed.

In claim 9, it is not understood in the context of the claimed invention exactly what is meant by “the hinge mechanism extends though corresponding removed portions of facing adjacent sides of the units”. What constitutes this structure.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 7-9 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Haneda et al. US Patent 5,900,848. A portable computer, comprising a first unit 1 having a first display module 3; a second unit 2 being capable of being folded on and unfolded from the first unit; and a hinge mechanism 9 configured to support reciprocal folding movements of the first and second units, wherein the hinge mechanism is positioned along a lateral area between the first display module and an outer lateral edge of the first unit (see below figure). The second unit has a second display module 2 and the hinge mechanism is positioned along a lateral area between the second display module and an outer lateral edge of the second unit (in the same way as for the first, as shown in the below figure). The first and second units have top surfaces respectively containing the display modules, and wherein, as best understood, when the second unit moves from the folded to an unfolded position the hinge mechanism extends though corresponding removed portions of facing adjacent sides of the units--the removed portions being

considered elements (not shown) to which the hinge member 9 are rotatable attached to unit, as conventional in the art. The device functions in an overlapping fashion as claimed. Touch screen inputs are disclosed.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haneda et al. As best understood, it would have been an obvious matter of design choice to make the different portions of the device of whatever form or shape was desired or expedient. A change in form or shape is generally recognized as being within the level of ordinary skill in the art, absent any showing of unexpected results. *In re Dailey et al.*, 149 USPQ 47. Such a modification is not critical to the design and would have produced no unexpected results. One reason that one skilled in the art may elect to modify the device in this way is for achieving a particular visual appearance of the device, for aesthetic purposes.



10. Claims 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Christ, Jr., US Patent 6,532,147, in view of Hildebrandt, and US Patent 6,464,195, and Haneda et al., US Patent 5,900,848, and Tsao, US Patent 6,016,171.

Christ provides a hinge unit of a portable computer, a hinge link, the hinge link connecting the first unit 24 with a second unit 22; a movable hinge bracket 84 assembled with the second unit and configured to be rotated about a second hinge shaft at 80, the movable hinge bracket having a guide section for guiding the hinge link that is movably inserted through the movable hinge bracket. As best understood, the hinge mechanism is positioned along a lateral area between the second display module and an outer lateral edge of the second unit.

Christ provides the claimed invention except (1) the hinge unit comprising a fixed hinge plate fixed to a first unit having a first display module, the fixed hinge plate having a first hinge cylinder; (2) a second display module; and (3) a stopper disposed at a corresponding portion between the hinge link and the guide section of the movable hinge bracket to prevent the hinge link from moving as claimed.

Regarding (1), such structure is highly well know in the art of hinge constructions. Hildebrandt teaches the concept as a means of hinging members together. It would have been obvious at the time the invention was made for one

skilled in the art to have included in the design of the combination such a modification for the purpose of hinging the members together.

Regarding (2), Haneda teaches both first and second displays for a particular computer application. It would have been obvious to have modified the device to include such a modification, for the purpose of gaining utility in a particular computer application.

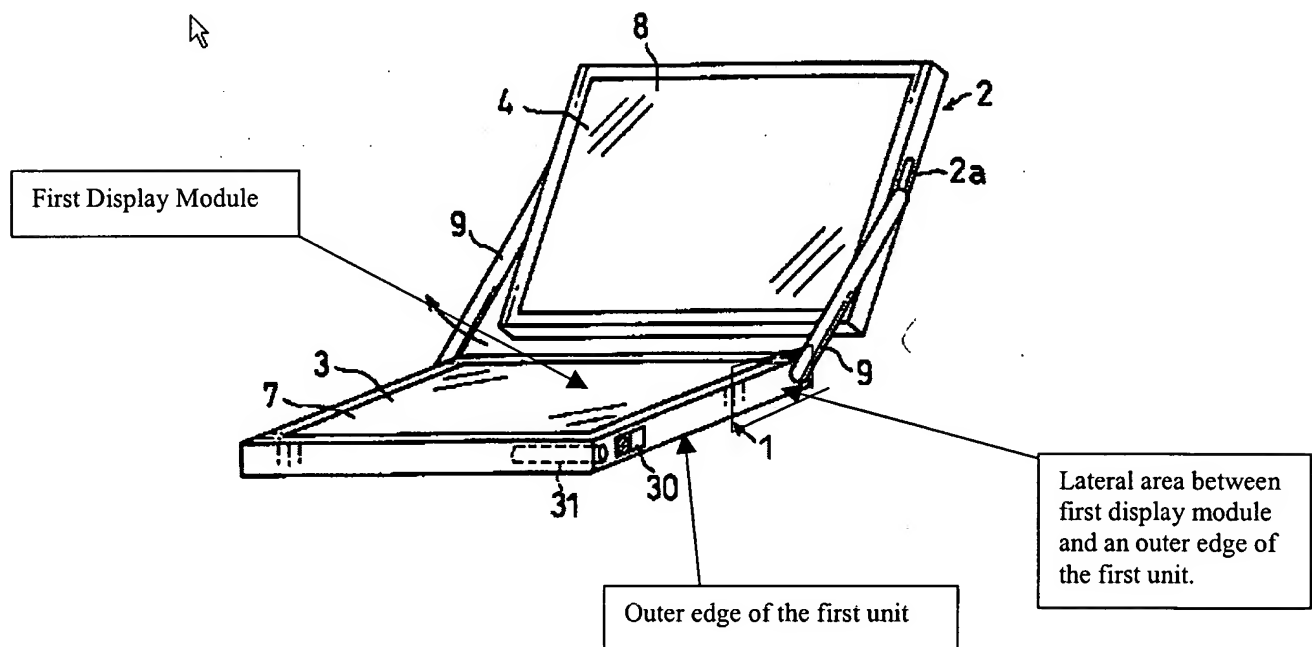
Regarding (3), Tsao teaches a stopper (31", 562) disposed at a corresponding portion between a link 3 and a guide section. It would have been obvious to include this concept in the design of the combination for the purpose of gaining means of retaining the display in a desired position along the link.

11. Claims 12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Christ, Jr., in view of Hildebrandt, and Haneda et al., and Tsao.

Christ provides the claimed invention except (1) the hinge unit comprising a fixed hinge plate fixed to a first unit having a first display module, the fixed hinge plate having a first hinge cylinder; (2) a second display module; (3) a stopper disposed at a corresponding portion between the hinge link and the guide section of the movable hinge bracket to prevent the hinge link from moving as claimed; and (4) explicitly disclosing the embodiment of claim 15.

See the rejection of claims 1 and 5 above for (1)-(3).

Regarding (4), claim 15, as best understood, the resulting combination would obviously have the hinge link and the movable hinge bracket being disposed out of sides of the first and second units, and the first hinge shaft and the second hinge shaft extend inward through the sides of the first and second units from the hinge link and the movable hinge bracket, respectively (see figures 7-9 of Christ).



***Allowable Subject Matter***

12. Claims 2, 4, 13, and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. Claims 3 and 6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Williams whose telephone number is (571) 272-7064. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on (571) 272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mark Williams  
2/3/06



**BRIAN E. GLESSNER**  
**SUPERVISORY PATENT EXAMINER**